



Sonoma County Board of Zoning Adjustments STAFF REPORT

FILE: UPE15-0065
DATE: July 19, 2018
TIME: 2:30 p.m.
STAFF: Jennifer Faso, Project Planner

Appeal Period: 10 calendar days

SUMMARY

Applicant: Peter Davis, Enerparc, Inc.
Owner: Seven Arches Vineyard, LLC
Location: 1255 Hiatt Road, Cloverdale
APNs: 115-260-023
Supervisory District No.: 4
Subject: Use Permit for Commercial Ground Mounted Solar System
PROPOSAL: Request for a Use Permit to allow a commercial 3.5 acre/1-megawatt photovoltaic ground-mounted solar system on a portion of a 375 - acre parcel.
Environmental Determination: Mitigated Negative Declaration
General Plan: Resources and Rural Development
Specific/Area Plan: N/A
Ord. Reference: Section 26-88-200
Zoning: RRD (Resources and Rural Development) B6-160 acre density, RC (Riparian Corridor, VOH (Valley Oak Habitat)
Land Conservation Contract: Non-Prime Land Conservation Contract



Application Complete

for Processing: June 12, 2018

RECOMMENDATION: Recommend that the Board of Zoning Adjustments adopt the Mitigated Negative Declaration and approve the request for a Use Permit to allow a commercial 3.5 acre/one - megawatt photovoltaic ground-mounted solar system on a portion of a 375 acre parcel.

EXECUTIVE SUMMARY: The proposed project is a commercial one megawatt alternating current photovoltaic (PV) ground mounted solar power facility on a portion of 375 acre parcel. The parcel contains three single family dwellings, agricultural barns, associated agricultural structures, vineyards, grazing lands and open areas.

On September 19, 2016, a Notice of Waiver of Public Hearing was mailed to neighbors within 300 feet of the project site and posted in three locations in the vicinity of the project site. A request for a public hearing was submitted from an adjacent property owner within the notice period. The project was previously scheduled for the November 17, 2016 Board of Zoning Adjustments agenda and the item was continued without a public hearing to address project consistency with the Land Conservation Act Contract.

The project site is under a Non-prime Land Conservation Contract (Williamson Act Contract). The proposed project meets the standards of the Sonoma County Uniform Rules for Agricultural Preserves and farmland Security Zones. This discussion is included in Issue #3 below. The project is consistent with the Zoning Code siting and development standards for renewable energy facilities.

ANALYSIS

Project Description:

The request is for a Use Permit to construct and operate a one megawatt alternating current photovoltaic (PV) ground mounted solar power facility within a 3.5 acre footprint on a portion of a 375 acre parcel as described in the project description (see Exhibit C).

The purpose of the project is to generate electricity for sale under a power purchase agreement to the Sonoma Clean Power Authority for a period of 20 years. Sonoma Clean Power Authority is a new, locally controlled utility in Sonoma County that provides customers in participating cities with the option of using environmentally friendly power primarily generated by renewable sources.

The proposed project will utilize arrays of ground mounted photovoltaic modules on fixed tilt racking structures. The modules will be installed using rammed metal piers, therefore concrete footings will not be required. The 3.5 acre solar system area will be enclosed with a six foot tall

fence and will be located in the northwest corner of the subject parcel (see Exhibit F). The array will consist of 4,400 photovoltaic solar panels arranged in 21 rows. Each ground mounted array is eight feet tall at the tallest point. The modules will extend over an area approximately 389 feet long by approximately 391- feet wide (3.5 acres).

An existing Pacific Gas and Electric (PG& E) distribution line located approximately 1,300 feet south of the project site will be used to connect the project to the PG&E electrical grid.

The solar facility site will be accessed from existing paved roads and existing gravel ranch roads. No new grading is required for this project. The operation of the solar array will not require personnel on a daily basis, however maintenance inspections and real-time remote production performance monitoring will be required. These inspections will require personnel to visit the site approximately four times a year.

The operation of the solar array will not generate any new sources of noise and there will be no on-site generator. The solar facility will use solar power or power from the Pacific Gas and Electric to power itself.

It is anticipated that installation of the project will take less than 90 days. During construction a maximum of ten construction personnel (laborers, electrician, support personnel and construction management) will be located on the site on a daily basis. Anticipated construction equipment includes pickup trucks, forklifts, and small compactors. Construction work will primarily consist of installing assembly of pre-fabricated parts and piers. Construction access will be via Highway 101, Dutcher Creek Road and Kelly Road, connecting to the on-site gravel ranch road.

Construction of the project will be staged as detailed below:

1. Mobilization. Equipment and materials will be delivered to the site. The designated laydown and storage area for the materials will be located adjacent to the project site, on approximately 0.5 acres. The materials will be stored in secure metal container boxes. Security fencing will also be delivered and installed during this phase. The security fencing will remain for the lifetime of the project.
2. Construction of fixed tilt racking. Metal piers will be driven into the ground to form the foundation of the system. The racking assemble will take place following the installation of the piers.
3. Trenching for wiring and electrical conduit. The groundwork for the electrical system will take place during this phase. Trenches will be created for direct burial of electrical wire and electrical communications as necessary. Equipment operating during this phase will include trenchers, compactors, and forklifts.
4. Installation of solar PV System. The PV modules will be installed and attached to the racking, while combiner boxes, inverters, transformers, communication equipment, supplemental

electrical wiring, and any additional components will also be installed and /or wired. Forklifts and pickup trucks will be used during this construction phase.

5. System commissioning and demobilization. System commission and construction demobilization will take place in parallel. Electrical personnel will test and commission the system, while laborers remove all construction equipment, and storage containers. The laydown area will be restored to pre-mobilization conditions. The panels will be washed and solar electrical generation will commence.

No trees will be removed as part of the proposed project.

Background:

On September 19, 2016, a Notice of Waiver of Public Hearing was mailed to neighbors within 300 feet of the project site and posted in three locations in the vicinity of the project site. A request for a public hearing was submitted from an adjacent property owner within the notice period (see Exhibit D). As indicated above this item was previously scheduled for a November 17, 2016 public hearing but this item was continued to address project consistency with the requirements of the Williamson Act contract.

Site Characteristics:

The project site is located on a portion of a 375 acre parcel in the hills southwest of the City of Cloverdale, approximately 1.15 miles west of US Highway 101 and 2.5 miles south of Downtown Cloverdale. The proposed solar system would occupy a maximum of 3.5 acres in the northwest corner of the subject parcel (see Exhibit F).

The project site is characterized by rolling hillside of nonnative grasslands with scattered oak woodlands and various ornamental, nonnative tree species. The site is surrounded by higher elevation hillsides to the northwest and south and lower elevations hillsides to the east.

The site is developed with three residence dwellings, two agricultural barns, associated agricultural structures, grazing lands, vineyards and open areas.

Surrounding Land Use and Zoning:

Surrounding land uses consist mainly of large parcels that are utilized as grazing land, vineyards, and rural single family dwellings.

North: Grazing Land and existing permitted solar PV farm zoned RRD (Resources and Rural Development)
South: Grazing Land, Vineyards and Residence zoned RRD (Resources and Rural Development)
East: Grazing Land and Vineyards, zoned RRD (Resources and Rural Development)
West: Grazing Land and Vineyards, zoned RRD (Resources and Rural Development)

DISCUSSION OF ISSUES

Issue #1: General Plan Consistency

The project site's General Plan designation is Resources and Rural Development. This designation is intended to provide lands for very low density residential development and to provide for protection and development of natural resources. The proposed project, a solar array, is consistent with the intent of the land use designation to develop natural resources in that the project would utilize sunlight for utility grid electrical energy generation. The Open Space and Resource Conservation Element and the Land Use Element of the General Plan includes the following Goals and Policies that apply to the proposed project.

GOAL OSRC-15: *"Contribute to the supply of energy in the County primarily by increased reliance on renewable energy sources".*

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Objective OSRC-15.2: *"Promote the use of renewable energy and distributed energy generation systems and facilities in new development in the County.**

Objective OSRC-15.3: *Establish guidelines and standards for development of energy generation systems and facilities in the County".*

GOAL LU-10: *"The uses and intensities of any land development shall be consistent with preservation of important biotic resource areas and scenic features."*

Objective LU-10.1: *"Accomplish development on lands with important biotic resources and scenic features in a manner which preserves and enhances these features."*

GOAL LU-11: *"Promote a sustainable future where residents can enjoy a high quality of life for a long term, including a clean and beautiful environment and a balance of employment, housing, infrastructure and services."*

Policy LU-11b: *"Encourage all types of development and land uses to use alternative renewable energy sources and meaningful energy conservation measures."*

Staff analysis:

The proposed project is consistent with the General Plan in that the primary use of the project parcel will remain grazing and agriculture which meets the intent of the Rural and Resource land

designation. Only 3.5 acres of site will be used for the project while grazing will continue to exist on the site. Additionally the proposed project will be consistent with the goals and policies of the Open Space and Resource Conservation Element and the Land Use Element. The solar system will not be located within any of the scenic resource areas identified by the General Plan and does not affect sensitive biotic resources. Furthermore the project involves generation of alternative renewable energy sources consistent with goals and policies of the General Plan.

Issue #2: Zoning Consistency

The project site is zoned Resources and Rural Development (RRD). The purpose of the RRD zone is as follows:

"Implement the provisions of the resource and rural development land use category of the General Plan, namely to provide protection of land needed for commercial timber production, geothermal production, aggregate resources production; lands needed for protection of watershed, fish and wildlife habitat, biotic resources, and for agricultural production activities that are not subject to all of the policies contained in the agricultural resources element of the General Plan. The resources and rural development district is also intended to allow very low density residential development and recreational and visitor-serving uses where compatible with resource use and available public services."

In the RRD zoning district, commercial solar facilities up to five acres in size are permitted with Use Permit approval. The proposed solar array will be a maximum of 3.5 acres in size. The siting criteria and development standards of the Zoning Ordinance are included below with staff analysis.

Section 26-88-200(b)(1)

Zoning Ordinance Requirement	Staff Analysis
<i>Aesthetics</i> - Renewable energy facilities shall be sited to minimize view impacts from public roads and adjacent residential areas	A Visual Analysis was prepared by Tetra Tech for the proposed project and has been included as an attachment to the Mitigated Negative Declaration. The Visual Assessment analyzed the potential visibility of the solar array from various private and public viewpoints and analyzed any potential for glare. The analysis was based on the proposed height of the PV modules and visual screening from topography and vegetation. The analysis concludes that the proposed project would have a less than significant impact on the scenic resources, recreational viewpoints and nearby residences, as discussed below.

	<p>The project site is not located within a Scenic Landscape Unit or Scenic Resource Zone.</p> <p>The proposed solar structures will be neutral colors (grays) and non-reflective with no lighting. The facility's colors are intended to blend with the natural environment.</p> <p>Residences are located on adjacent properties along Hiatt Road and Johnson Road, at the foot of the hill approximately 0.15 miles to the south of the proposed project. Photos were taken from the residence to the south and from Kelly Road. Residents would have inferior unobstructed to partially obstructed views of the project because of terrain and existing vegetation including trees, vineyards and grasslands which would screen the majority of the project site.</p> <p>Views from the City of Cloverdale and from Highway 101 would be completely screened by topography and existing vegetation. Potential recreational users and residences at higher elevations would also be primarily screened by topography and dense wooded areas covering much of the landscape. Residential viewers located along the hillsides east of Highway 101 would be partially to completely screened by terrain and vegetation. The portions of the site that would be visible to these viewers would be seen in context with an existing 3 megawatt solar facility located 0.25 miles north of the site. The project's components would be similar to the existing facility in form, line, color and texture, and therefore, contrast would be minimized.</p> <p>The PG&E interconnect transmission line would be seen by the residences located southeast of the project site, however, it would be in the context and same form, line and color of the existing PG&E distribution line.</p>
<i>Air Safety-</i> Renewable energy facilities shall not be located within the approach zone (outer or inner safety zones) or the inner turning zones for any public use airport	<p>The proposed project will not be located within the approach zone of any public use airport as shown on the Public Use Airport Map of the General Plan.</p> <p>The glare analysis conducted as part of the Visual Analysis also evaluated glare on the approach path for the Cloverdale Municipal Airport, at a distance of ¼ mile from the threshold</p>

	<p>of the runway. A low potential for glare was found in this location at limited hours and periods during the year. The Visual Assessment concluded that this minimal amount of glare is a type of glare that is in a low impact category, with low potential for glare.</p> <p>The Federal Aviation Administration reviewed the project and conducted an aeronautical study. They concluded that the project would not be a hazard to air navigation and issued A Determination of No Hazard to Air Navigation on December 26, 2016.</p>
<p><i>Biotic Resources- Renewable energy facilities shall be sited to avoid or minimize impacts to sensitive biotic habitats including woodlands, wetlands, streams, and habitat connectivity corridors as identified in the General Plan, Area Plan, Specific Plan or a Biotic Resource combining zone</i></p>	<p>A Biological Resources Analysis Report was prepared by Tetra Tech Inc. for the proposed project and has been included as an attachment to the Mitigated Negative Declaration. The purpose of the biological site assessment was to identify any sensitive biological resources at the project site. The conclusion of the assessment was that the project site is not within any sensitive biotic habitats.</p> <p>The project site has a Riparian Corridor (RC) combining zoning designation due to Icaria Creek. The footprint of the proposed solar array is more than 400 feet from the riparian corridor top of bank. This exceeds the 50 foot minimum required setback from the top of bank. Therefore the project is consistent with the RC zoning code setback regulations.</p> <p>The Interconnect transmission line will span Icaria Creek however there will be no work within the creek or within 50 feet from the top of creek bank.</p> <p>Further discussion of the Biotic Resources analysis is included in the attached Mitigated Negative Declaration.</p>
<p><i>Cultural Resources – Renewable energy facilities shall be sited to avoid or mitigate impacts to significant cultural and historic resources.</i></p>	<p>The project site is not located within an historic district.</p> <p>A records search was conducted for the project site by the Sonoma State University's Anthropological Studies Center. Historical literature and maps were reviewed and no indications of the possibility of historic-period archaeological resources were located within the project area.</p>

	<p>On August 26, 2015 Permit Sonoma staff referred the project application to Native American Tribes within Sonoma County to request consultation under AB-52 (the request for consultation period ended September 26, 2015). No consultation was requested nor were there requests for additional information.</p>
<p><i>Farmland Protection</i> – <i>Where a commercial renewable energy facility is sited within an Agricultural Zone, the primary use of the parcel shall remain in agriculture pursuant to General Plan Policy AR-4a.</i></p>	<p>The project site is a 3.5 acre portion of a 375 acre parcel. Under the Important Farmlands Map, the project site is not designated Prime, Unique or Statewide Importance. The primary use of the parcel is grazing and will continue to be so.</p> <p>General Plan Policy AR-4a indicates that agriculture land use categories shall be agricultural production and related processing and that that agriculture uses should be primary. The proposed project is consistent with this policy because the total project parcel is 375 acres and only 3.5 acres (1 percent) will be used for the solar system. Over 50 percent of the site will remain as grazing land.</p> <p>The project site is under a Land Conservation Contract. Renewable Energy Facilities are listed as a compatible use in the Sonoma County Uniform Rules for Agricultural Preserves and with the addition of the project on the site the compatible uses will not exceed five acres. See further discussion included in Issue #3 below.</p>
<p><i>Proximity to Utility Transmission</i> - <i>For renewable energy facilities interconnected to transmission lines greater than 6kV, the location of new transmission lines, poles, and utility sub-stations shall be identified on the site plans. If high voltage (100kV) or private transmission lines are proposed, they shall be considered as part of the use permit process for the renewable energy facility</i></p>	<p>The proposed project will interconnect with the existing Pacific Gas and Electric line which is approximately 1,300 feet south of the project site (see Exhibit F).</p> <p>The Zoning Code requires that no building permits shall be issued until evidence has been provided to PRMD that the proposed interconnection is acceptable to Pacific Gas and Electric and evidence that the California Public Utilities Commission has approved the location of the new utility owned transmission lines. This requirement is included in recommended conditions of approval.</p>

<p>Grading and Access <i>Renewable energy facilities shall be sited to maintain natural grades and use existing roads for access to the extent practical. Construction of new roads shall be avoided as much as possible.</i></p>	<p>The proposed project will be sited to maintain natural grades and will use existing gravel ranch roads to access the project site. The array will be installed using rammed piers and therefore no grading is required for the solar array, and no grading is expected on existing ranch roads.</p> <p>Standard Conditions of Approval minimize construction related dust during construction.</p>
<p>Land Use - Renewable energy accessory systems and commercial facilities shall be located within existing built or developed areas, on or within existing legally established structures or over parking areas to the extent practicable.</p>	<p>The Zoning Code states that commercial solar facilities shall be located within existing built or developed areas to the extent practical. Even though the proposed project site is not within a developed area the proposed project site is a suitable location because the solar array will not be visible from public roads and the existing terrain and topography will help screen the majority of the solar system from adjacent properties.</p> <p>Use permit approval is required to allow this use to ensure that it would be compatible and meets the intent of the General Plan and Zoning Ordinance. The subject site has relatively little existing development considering the project site is 375 acres in size and is used primarily for grazing purposes with associated residential uses. The site has characteristics that make it suitable for solar production, solar exposure and has relatively close access to existing utility transmission lines.</p> <p>As discussed in Issue 1 above the project is consistent with the General Plan policies because operation of the facility will not generate significant traffic impacts given that the facility will not require personnel on a daily basis. Traffic related to required maintenance inspections and servicing will be limited to approximately four inspections a year. Construction traffic will be limited and will be temporary as discussed in the project description above.</p>

Section 26-88-200(a)(2)

Zoning Ordinance Requirements	Staff Analysis
Air Quality - During site preparation, grading and	During site preparation and installation of the solar array the applicant will use best management practices to minimize

<i>construction, the operator must implement best management practices to minimize dust and wind erosion including, regularly water roads and construction staging areas as necessary.</i>	dust and wind erosion, as required by recommended project conditions of approval.
Fire Protection - Renewable energy facilities shall meet <u>Chapter 13</u> of the Sonoma County Code (the Fire Safety Ordinance).	<p>A building permit is required prior to installation of the solar system and as part of the building permit review process conditions of approval require the County Fire Marshal and local fire protection district to review and approve the project Fire Prevention Plan prior to issuance of a building permit.</p> <p>As part of the referral process the project application was distributed to the local fire protection district for their review. No significant concerns have been raised by the Fire Protection District.</p>
Noise - Renewable energy facilities shall be operated in compliance with the General Plan Noise Standards Table NE-2.	<p>The proposed project will be operated in compliance with the General Plan Noise Standards Table NE-2. A standard Condition of Approval has been added for Noise Standards.</p> <p>No new noise will be generated as a result of the operation of the proposed project. Any power that is needed to operate the solar array will be produced by solar power or will be supplied by Pacific Gas and Electric. Generators are not proposed as part of this project.</p> <p>During construction, noise may be generated on a temporary and limited basis. The project will be required to comply with the General Plan noise standards (Table NE-2) during construction along with the standards hours of operation for construction.</p>
County Impacts/Sales and Use Taxes - Prior to issuance of any grading or building permit(s), the owner/operator shall enter into an agreement with the County, in a form approved by the County Counsel, governing	A condition of Approval applies this development standard to the project and requires the necessary agreement to be finalized prior to issuance of a building permit.

<i>payment of sales and use taxes.</i>	
<i>Security and Fencing</i> - The site area for a renewable energy facility must be fenced to prevent unauthorized access and provide adequate signage.	The 3.5 acre solar array will be enclosed with a six foot chain link security fence to prevent unauthorized access. Controlled access gates will be included as part of the security fencing.
<i>Signs</i> - Temporary signs describing the project, and providing contact information for the contractor and operator shall be placed during construction and must be removed prior to final inspection and operation.	Recommended conditions of approval require temporary signs describing the project, and providing contact information for the contractor and operator during construction and must be removed prior to final inspection and operation. Signs for public or employee safety are required. No more than two signs relating the project address and name of the operator/facility may be placed onsite, subject to code standards and administrative design review. Outdoor displays, billboards or advertising signs of any kind either on- or off-site are prohibited unless approved as a part of the Use Permit.
<i>Decommissioning</i> - A decommissioning plan shall be required as part of any use permit for a renewable energy facility	The project and all components installed will be removed and the property will be restored to its original state within 12 months after the useful life of the system. The applicant submitted Decommissioning Plan is included as part of the project description (see Exhibit C).

Based on the analysis above the proposed project is consistent with Zoning Ordinance Section 26-88-200 that regulates siting and development standards for Renewable Energy Systems and Facilities.

Issue #3: Land Conservation Act Contract

The project site is under a Non-prime Land Conservation Contract (Williamson Act Contract). In order to comply with the contract, land must meet the following standards of the Sonoma County Uniform Rules:

- 1.) The land must be devoted to an agriculture or open space use as defined by the William Act. The County requires at least 50% of the land be devoted to agriculture or open space use to meet this standard.

Staff analysis: The proposed project and compatible uses will occupy a total of 4.61 acres of a 375 acre parcel that is used for grazing and agriculture. The Uniform Rules require that at least 50% of

the land be devoted to agriculture or open space. The proposed project is consistent with this requirement because the project area combined with the on-site compatible uses occupy 4.61 acres, which is less than the maximum. Based on the Landowners Statement of Compliance submitted with the project application the project will not change the current primary agriculture use of the property.

2). The land must have a minimum parcel size of 10 acres for Type 1 or 40 acres for Type 11 contract.

Staff analysis: The total subject parcel is 375 acres, consistent with the 40 acre minimum parcel size for a Non-Prime Land Conservation Contract.

3). Compatible uses may be permitted provided that they are incidental to the primary use of the land for agriculture, listed in the County's Uniform Rules for Agriculture Preserves and meet the criteria for compatibility.

As described in the County's Uniform Rules for Agriculture Preserves "Compatible Use " is defined as any use determined by the county or city administering the preserve pursuant to sections 51231, 51238 or 51238.1 or by this act to be compatible with the agricultural, recreational, or open space use of land within the preserve and subject to contract.

Under Rule 8.3 C-E the Uniform Rules lists the following as a "compatible use"

Renewable energy power generation facilities providing power primarily for off-site use, when the facilities are located on nonprime agriculture land that is not state designed prime farmland, farmland of statewide importance or unique farmland.

Section 51238.1 of the Land Conservation Act states, "Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:

(1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.

(2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted land in agricultural preserves.

(3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

Staff analysis: Incidental has been defined by the County to mean, compatible uses may collectively occupy no more than 15 percent of the land area or five acres whichever is less. For the 375 acre project parcel size, the five acres or less threshold would apply. Under the proposed project no more than 3.5 acres would be used by the solar array. The total acres of the proposed project with the existing compatible uses will be 4.61 acres. This is less than the maximum permitted 5 acres of collectively incidental uses. The project will not compromise the current grazing operation even though the array footprint will be fenced and grazing will not occur within the footprint of the array. Furthermore, as listed above, the County's Uniform Rules list renewable energy as a "compatible use" for land under an agricultural contract.

Issue #4: Environmental Determination

A Mitigated Negative Declaration (MND) including mitigations was prepared for this project. Mitigations are provided for the following environmental factors; Aesthetics, Air Quality, Cultural Resources, Geology, Hazards and Hazardous Materials, Hydrology and Water Quality and Noise. Based on the analysis in the MND and its source documents, and with further clarification provided in the staff report, the proposed project will not have a substantial adverse impact on the environment provided that the identified mitigations are included as conditions of approval for the project.

STAFF RECOMMENDATION

Staff recommends that the Board of Zoning Adjustment adopt the Mitigated Negative Declaration and approve the request for a Use Permit to allow a commercial one megawatt ground mount solar system on a 3.5 acre portion of a 375 acre parcel.

LIST OF ATTACHMENTS

- EXHIBIT A: Draft Conditions of Approval
- EXHIBIT B: Vicinity Map
- EXHIBIT C: Project Description submitted by applicant
- EXHIBIT D: Request for Hearing
- EXHIBIT E: Letter from Sonoma Clean Power dated December 12, 2017
- EXHIBIT F: Reduced project plans
- EXHIBIT G: Draft Resolution

Separate Attachment for Commissioners: Mitigated Negative Declaration and full size maps